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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,568	12/31/2003	Don J. Nguyen	42P17639	5721

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EXAMINER

KAPLAN, HAL IRA

ART UNIT PAPER NUMBER

2836

DATE MAILED: 06/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/750,568	Applicant(s) NGUYEN ET AL.	
	Examiner Hal I. Kaplan	Art Unit 2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-13, 15, 16, 18-22, 24-29 and 31 is/are rejected.
- 7) ☒ Claim(s) 4, 14, 17, 23 and 30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. <u>20060622</u> . |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/17/05</u> . | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: Page 8, line 16 contains the word "describe". It appears this should be "described".

Appropriate correction is required.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "430" in Figure 4 and the specification (see page 7, line 7) has been used to designate both the battery unit and the charging selector.
3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 338 in Figure 3 (see page 6, lines 26 and 28).
4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 800 in Figure 8. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the

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examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

5. Claims 10 and 27 are objected to because of the following informalities: Claims 10 and 27 do not have a period at the end of the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-3, 5, 10-13, 15, 16, 18-22, 27-29, and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by the US patent of Freeman et al. (6,650,089).

As to claims 1 and 20, Freeman, drawn to a control circuit for multiple battery systems with capacity gauge on end equipment, discloses a mobile computer (see column 3, lines 25-27); and a power apparatus for the mobile computer, said apparatus comprising: an input power port (DC); a power rail (22); a battery unit (18,20); and a system charger voltage regulator (VR) (26) to couple the input power port (DC) to the battery unit (18,20), and the battery unit (18,20) to couple with the system charger VR

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(26) and the power rail (22) (see column 3, lines 39-42 and 62-65; column 4, lines 4-6; and Figure 1).

As to claims 2 and 21, the system charger VR (26) is to provide a regulated voltage signal when a power source is coupled to the input power port (DC), the regulated voltage signal to simultaneously power both the power rail (22) and the battery unit (18,20) (see column 4, lines 11-15).

As to claims 3, 16, and 22, the battery unit (18,20) is to provide a battery voltage signal to power the power rail (22) when no power source is coupled to the input power port (DC) (see column 4, lines 16-19).

As to claims 5 and 18, the power source comprises a voltage from an AC/DC converter (see column 4, lines 1-6).

As to claims 10 and 27, the power rail (22) extends beyond the battery unit (18) to couple the system charger VR (26) to the battery unit (18,20) (see Figure 1).

As to claims 11 and 28, the battery unit (18,20) comprises a battery pack port to receive a battery pack (18) (see column 3, lines 39-42).

As to claim 12, the battery unit (18,20) further comprises a switch (20) to selectively couple the battery pack port to the power rail (22) (see column 3, lines 39-44).

As to claims 13 and 29, if the battery pack (18) is coupled to the battery pack port, the switch (20) is to couple the battery pack port to the power rail (22) for either powering the power rail (22) or charging the battery pack (18) (see column 4, lines 8-19).

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As to claims 15 and 31, the battery unit (18,20) comprises a plurality of battery pack ports, each to receive a battery pack (18) (see column 3, lines 39-42).

As to claim 19, providing the regulated voltage signal to power the battery unit (18,20) comprises recharging a discharged battery (18) in the battery unit (18,20) (see column 4, lines 11-15).

8. Claims 1-3, 5-7, 10-13, 16, 18, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by the US patent of Pinder (5,789,098).

As to claim 1, Pinder, drawn to a method of detecting external voltage source for disablement of battery conservation mode in a portable communications device, discloses an apparatus comprising: an input power port (110); a power rail (output to power switch); a battery unit (100,120); and a system charger voltage regulator (VR) to couple the input power port (110) to the battery unit (100,120), the battery unit (100,120) to couple with the system charger VR and the power rail (see column 2, lines 57-63 and Figure 3).

As to claim 2, the system charger VR is to provide a regulated voltage signal when a power source is coupled to the input power port (110), the regulated voltage signal to simultaneously power both the power rail and the battery unit (100,120) (see column 2, lines 59-63).

As to claims 3 and 16, the battery unit (100,120) is to provide a battery voltage signal to power the power rail when no power source is coupled to the input power port (110) (see column 2, lines 59-62).

As to claims 5 and 18, the power source comprises a voltage from an external battery (external DC source) (see column 2, lines 57-59).

As to claim 6, the battery unit (100,120) comprises a battery pack port to couple to the system charger VR and to receive a battery pack (100) (see Figure 3); and a power source selector (120) to selectively couple either the system charger VR to the power rail or the battery pack port to the power rail (see column 2, lines 59-63).

As to claim 7, the system charger is to power the battery pack port to recharge a discharged battery (100) coupled to the battery pack port (see column 2, lines 62-63).

As to claim 10, the power rail extends beyond the battery unit (100,120) to couple the system charger VR to the battery unit (see column 2, lines 62-63).

As to claim 11, the battery unit (100,120) comprises a battery pack port to receive a battery pack (see Figure 3).

As to claim 12, the battery unit (100,120) further comprises a switch (120) to selectively couple the battery pack port to the power rail (see column 2, lines 59-62).

As to claim 13, if the battery pack (100) is coupled to the battery pack port, the switch (120) is to couple the battery back port to the power rail for either powering the power rail or charging the battery pack (100) (see column 2, lines 59-63).

As to claim 19, providing the regulated voltage signal to power the battery unit (100,120) comprises recharging a discharged battery (100) in the battery unit (100,120) (see column 2, lines 62-63).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 8 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pinder.

As to claims 8 and 15, Pinder discloses all of the claimed features, as set forth

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above, except for a plurality of battery pack ports. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to connect multiple batteries to the device of Pinder, because it has been held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced (*In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960)). See MPEP §2144.04(VI)(B).

13. Claims 9 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pinder in view of Freeman.

As to claim 9, Pinder discloses all of the claimed features, as set forth above, except for a battery charging selector. Freeman discloses a battery charging selector (20) to couple between the system charger VR (26) and each of the plurality of battery pack ports, the battery charging selector (20) to selectively couple any one of the plurality of battery pack ports to the system charger VR (see column 3, lines 39-42 and column 4, lines 52-54). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to build the device of Pinder with multiple batteries selectively coupled to the system charger VR, in order to allow the device to run for a longer period of time when there is no main power supply by increasing battery redundancy.

As to claim 24, Freeman discloses a mobile computer (see column 3, lines 25-27).

As to claims 25 and 26, Pinder in view of Freeman disclose all of the claimed features, as set forth above.

Allowable Subject Matter

14. Claims 4, 14, 17, 23, and 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

15. The following is a statement of reasons for the indication of allowable subject matter:

Claims 4, 17, and 23 contain allowable subject matter because none of the prior art of record suggests or discloses the regulated voltage signal and the battery voltage signal having a common upper bound and a common lower bound, in combination with the remaining claimed features.

Claims 14 and 30 contain allowable subject matter because none of the prior art of record suggests or discloses a battery pack comprising a switch control port to receive a switch control signal from the battery pack port, in combination with the remaining claimed features.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US patents to Masson (4,673,826), Kim (5,955,797), Thandiwe et al. (6,072,250), Levesque (6,348,744), Matsuyama (6,384,570), Neumann (6,573,621), Takano et al. (6,683,439), Hansmann et al. (7,030,517), and Odaohhara (7,057,309) disclose similar devices.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hal I. Kaplan whose telephone number is 571-272-8587. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 571-272-2800 x36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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PRIMARY EXAMINER